

VIDALINC
Appl. No. 10/590,362
Atty. Ref.: 960-50
Amendment
May 26, 2009

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A chromatography column comprising an enclosure, a first port[[,]] configured to put the enclosure in communication with a tank comprising a dry chromatography resin made of particles having a size distributed between a minimum size and a maximum size, and a second port[[,]] configured to put the enclosure in communication with a pump,

wherein the first port forms a passage having a minimum section which is at least 10 000 times as large as a particle section corresponding to the maximum size particles.

2. (Previously Presented) The chromatography column of claim 1, wherein the enclosure, when in use, extends vertically between a bottom and a top, the second port being located above the first port.

3. (Currently Amended) The chromatography column of claim 1, wherein the first port is provided with an inlet valve having a minimum section which is at least 10 000 times as large as the particle section corresponding to the maximum size particles.

4. (Currently Amended) A chromatography column comprising:

- an enclosure,

- a first port provided with an inlet valve[[,]]configured to put the enclosure in communication with a tank comprising a dry chromatography resin made of particles having a size distributed between a minimum size and a maximum size, and

- a second port[[,]]configured to put the enclosure in communication with a pump,

wherein the inlet valve comprises a chamber, an inlet duct and a piston,

- the chamber communicating with the enclosure through a first aperture ,
- the inlet duct communicating with the chamber through a second aperture

and being adapted to be connected to the tank, and

- the piston being movable in the chamber between a closing position, where it closes the first and second apertures, and an opening position, where it opens the first and second apertures,~~said piston letting~~ and it lets free substantially all the space of the chamber between the first and second apertures.

5. (Previously Presented) The chromatography column of claim 4, wherein the enclosure, when in use, extends vertically between a bottom and a top, the second port being located above the first port.

6. (Previously Presented) The chromatography column of claim 4, wherein the valve defines a passage between a pipe adapted to be connected to the duct and the enclosure, said passage having a minimum section which corresponds to the section of any of the first and second apertures.

7. (Original) The chromatography column of claim 6, wherein the minimum section of the passage is at least 10 000 times as large as the particle section corresponding to the maximum size particles.

8. (Previously Presented) The chromatography column of claim 4, wherein the piston when in closing position has an end surface with a tapered shape, said end surface having a portion which is flush with the internal surface of the enclosure.

9. (Previously Presented) The chromatography column of claim 1, wherein the

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first port forms a passage having a minimum section corresponding to at least a minimum internal diameter of 20 mm.

10. (Withdrawn) A module for loading a chromatography resin into a chromatography column of claim 1, said module comprising said chromatography column and a pump connected to the second port through a pipe.

11. (Withdrawn) The module of claim 10, further comprising a tank for chromatography resin, said tank being connected to the first port

12. (Withdrawn) A method for loading a chromatography resin into a chromatography column comprising an enclosure, a first port, to put the enclosure in communication with a tank comprising chromatography resin particles having a size distributed between a minimum size and a maximum size, and a second port, to put the enclosure in communication with a pump,

wherein the first port forms a passage having a minimum section which is at least 10 000 times as large as a particle section corresponding to the maximum size particles.

13. (Withdrawn) The method of claim 12, wherein said column comprises an enclosure having a first port and a second port, and said method comprising pumping a dry chromatography resin from a resin tank into the enclosure through the first port, via a pump connected to a second port.

14. (Withdrawn) The method of claim 12, wherein the vacuum pressure in the enclosure is between -100 kPa and - 50 kpa.

15. (Withdrawn) The method of claim 12, wherein the enclosure, when in use,

extends vertically between a bottom and a top, the second part being located above the first port.

16. (Withdrawn) A method for unloading a chromatography resin mixed with a liquid, from a chromatography column into a chromatography column comprising an enclosure, a first port, to put the enclosure in communication with a tank comprising chromatography resin particles having a size distributed between a minimum size and a maximum size, and a second port, to put the enclosure in communication with a pump, wherein the first port forms a passage having a minimum section which is at least 10 000 times as large as a particle section corresponding to the maximum size particles.

17. (Withdrawn) The method of claim 16, wherein said column comprises an enclosure having a high port located above a low port, this method comprising successively the steps of

- a) pumping the liquid from the enclosure through the low port,
- b) drying the chromatography resin comprised in the enclosure, and
- c) pumping the dried resin through the low part.

18. (Withdrawn) The method of claim 16, wherein the vacuum pressure in the enclosure is between -100 kPa and -50 kPa.

19. (Withdrawn) The method of claim 17, further comprising between steps b) and c) injecting a gas through the low port.

20. (Withdrawn) The method of claim 17, in which step b) comprises injecting a hot gas through the high port.

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21. (Withdrawn) The chromatography column of claim 4, wherein the first port forms a passage having a minimum section corresponding to at least a minimum internal diameter of 20 mm.

22. (Withdrawn) A module for loading a chromatography resin into a chromatography column of claim 4, said module comprising said chromatography column and a pump connected to the second port through a pipe.